



## Contents Volume 190

## Regular Letters

Pyrrhotite and the remanent magnetization of SNC meteorites: a changing perspective on Martian magnetism P. Rochette, J.-P. Lorand, G. Fillion and V. Sautter	1
Noise in the quiet zone M. Cronin, L. Tauxe, C. Constable, P. Selkin and T. Pick	13
On origin of near-axis volcanism and faulting at fast spreading mid-ocean ridges Y. Fialko	31
Crustal structure of Ascension Island from wide-angle seismic data: implications for the formation of near-ridge volcanic islands F. Klingelhöfer, T.A. Minshull, D.K. Blackman, P. Harben and V. Childers	41
Mineralogy of subducted basaltic crust (MORB) from 25 to 37 GPa, and chemical heterogeneity of the lower mantle S. Ono, E. Ito and T. Katsura	57
Phase relation and physical properties of an Al-depleted komatiite to 23 GPa Y. Nishihara and E. Takahashi	65
Fluid genesis through serpentinites and the origin of subsurface electrical conductors in Northwest India and adjoining regions V.K. Rao and S.N. Prasad	79
The effect of temperature, pressure, and sulfur content on viscosity of the Fe–FeS melt H. Terasaki, T. Kato, S. Urakawa, K.-i. Funakoshi, A. Suzuki, T. Okada, M. Maeda, J. Sato, T. Kubo and S. Kasai	93
Investigating the ancient Martian magnetic field using microwaves J. Shaw, M.J. Hill and S.J. Openshaw	103
The age of the inner core S. Labrosse, J.-P. Poirier and J.-L. Le Mouél	111
Latent heat effects of the major mantle phase transitions on low-angle subduction J. van Hunen, A.P. van den Berg and N.J. Vlaar	125
A hafnium isotope and trace element perspective on melting of the depleted mantle C. Chauvel and J. Blachert-Toft	137
Systematics of xenocrystic contamination: preservation of discrete feldspar populations at McCullough Pass Caldera revealed by $^{40}\text{Ar}/^{39}\text{Ar}$ dating T.L. Spell, E.I. Smith, A. Sanford and K.A. Zanetti	153
Lowermost mantle anisotropy beneath the Pacific: Imaging the source of the Hawaiian plume M.J. Fouch, K.M. Fischer and M.E. Wysession	167
The early Paleozoic carbon cycle Y. Goddérat, L.M. François and J. Veizer	181
High precision glacial-interglacial benthic foraminiferal Sr/Ca records from the eastern equatorial Atlantic Ocean and Caribbean Sea C.-C. Shen, D.W. Hastings, T. Lee, C.-H. Chiu, M.-Y. Lee, K.-Y. Wei and R.L. Edwards	197
Anomalous strontium and lead isotope signatures in the off-rift Öræfajökull central volcano in south-east Iceland T. Prestvik, S. Goldberg, H. Karlsson and K. Grönvold	211
Inherent gravitational instability of thickened continental crust with regionally developed low- to medium-pressure granulite facies metamorphism T.V. Gerya, W.V. Maresch, A.P. Willner, D.D. Van Reenen and C.A. Smit	221
Weak zone formation for initiating subduction from thermo-mechanical feedback of low-temperature plasticity J.M. Brønlund, K. Regenauer-Lieb and D.A. Yuen	237

Mantle thermal structure and active upwelling during continental breakup in the North Atlantic W.S. Holbrook, H.C. Larsen, J. Korenaga, T. Dahl-Jensen, I.D. Reid, P.B. Kelemen, J.R. Hopper, G.M. Kent, D. Lizarralde, S. Bernstein and R.S. Detrick .....	251
<b>Discussion</b>	
Comment on “ $^{40}\text{Ar}/^{39}\text{Ar}$ age of plagioclase from Acapulco meteorite and the problem of systematic errors in cosmochronology” by Paul R. Renne M. Trieloff, E.K. Jessberger and C. Fieni .....	267
Reply to Comment on “ $^{40}\text{Ar}/^{39}\text{Ar}$ age of plagioclase from Acapulco meteorite and the problem of systematic errors in cosmochronology” by Mario Trieloff, Elmar K. Jessberger and Christine Fieni P.R. Renne .....	271
<b>Corrigendum</b>	
Corrigendum to “Global ice volumes at the Last Glacial Maximum and early Lateglacial” [Earth Planet. Sci. Lett. 181 (2000) 513–527] K. Lambeck, Y. Yokoyama, P. Johnston and A. Purcell .....	275
<b>Erratum</b>	
Erratum to “Phanerozoic, pre-Cretaceous thermotectonic events in southern Sweden revealed by fission track thermochronology” C. Cederbom .....	277
<i>Author Index Volume 190</i> .....	281